A new species of *Hister* and notices of others (Col. Histeridae)

by

Sławomir MAZUR *

With 9 figures

Abstract

The new species *Hister ziczac* sp. n. is described and the variability of *Hister javanicus* is discussed. *H. coracinus, H. squalidus, H. corax* and *H. angulicollis* are considered as synonyms of *H. javanicus*.

This is a further paper dealing with tropical histerids. A new species of the genus *Hister* has been recognized among South Indian specimens collected by Mr. and Mrs. Nathan, conserved in the Muséum d'Histoire naturelle of Geneva and in my own collection. At this occasion, the synonymy of *Hister javanicus* Paykull is discussed.

For the privilege of studying specimens mentioned the author is indebted to Dr Ivan Löbl, Genève. The author wishes also to express his gratitude to Dr Stanisław A. Šlipiński, Warsaw, owing to whom it was possible to study the type-specimen of *Hister angulicollis* Bickh.

Special thanks are due to Dr Rupert L. Wenzel, Chicago, for having made possible the studies upon the histerid collection of Field Museum of Natural History and for his kind advices.

Hister ziczac sp. n. (Fig. 1-6)

Body oval, moderately convex, black, strongly shiny. Forehead smooth, a little concave medially, frontal stria distinct, slightly bent at middle. Mandibles flat or feebly convex, distinctly margined laterally (Fig. 1). Scapus and funiculus pitch-black, the antennal club paler, tomentose, with two distinct sutures.

^{*} Instytut Ochrony Lasu i Drewna AR, Rakowiecka 26/30, 02-528 Warszawa, Poland.

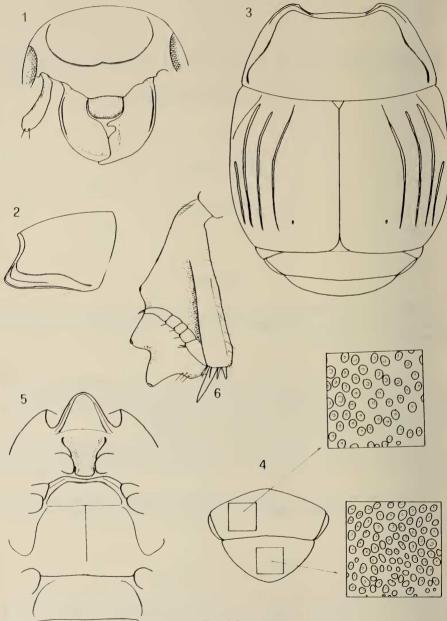


Fig. 1-6.

Hister ziczac sp. n.

1: head. 2: pronotum, lateral view. 3: upper side. 4: schema of pro- and pygidial punctation. 5: under side. 6: foretibia.

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Pronotum rounded laterally, its epipleurae more or less distinctly covered with yellowish ciliae. Pronotal striae distinct, impunctate. The inner one complete, strongly impressed and curved basally as figured (Fig. 2, 3). The outer one shortened basally, reaching to the middle. Marginal stria thin, interrupted anteriorly, reaching to the base of pronotum at sides.

Elytrae smooth, without subapical impressions. Dorsal striae very distinct, impunctate, 1-3 complete, the remaining ones absent, except the 4th one which is marked as one or several points at elytral apex (Fig. 3). Inner subhumeral stria distinct, reaching from the middle to the apex. Epipleura smooth, feebly impressed, with two striae.

Propygidium finely impressed at sides, coarsely and rather thickly (0,5-1) punctured laterally, the punctures become finer medially (2-3). Punctuation of pygidium (Fig. 4) thicker (0,2-1,0), only the apex smooth. All the punctures indistinctly ocellate. Microsculpture of interspaces very fine, composed with transverse lines.

Prosternal lobe rounded, very finely and rarely punctulate, with two distinct marginal striae, the outer one of them interrupted anteriorly. Prosternum convex, smooth. Mesosternum feebly sinuous, its marginal stria complete, not united with marginal metasternal stria (Fig. 5). Abdominal segment I with oblique striae laterally.

Legs a little paler as the body, the foretibiae with 3 teeth (Fig. 6), the mid- and hindtibiae with two rows of spinules at outer margin.

Length: PE: 5,5-7,2 mm; total: 6,0-9,0 mm. Width: 4,8-6,3mm.

Holotype: A male, India, Madras, Anaimalai Hills, Cinchona, 3500 ft, May 1976, leg. T. R. S. Nathan. Deposed in the Muséum d'Histoire naturelle de Genève.

Paratypes: specimens of untermined sex, the same collector: No 1 and 2, India, Kerala, Trivandrum Dt., Poonmudi Range, 3000 ft, May 1971, No 3: South India, Madras, Coimbatore, April 1967, No 4: South India, Anaimalai Hills, Cinchona, 3500 ft, May 1968, No 5: South India, Anaimalai Hills, Cinchona, 3500 ft, May 1959.

Paratype No 4 is deposed in the Muséum d'Histoire naturelle de Genève, the remaining ones are kept in the author's collection.

This species is closely related to the Ceylonian group of species: *Hister pteromalus* Mars., *H. divisifrons* Schmidt and *H. trigonifrons* Mars. From all these species it differs by strongly and coarsely punctate pygidium. From *H. pteromalus* and *H. divisifrons* it can be distinguished in having three instead of two complete dorsal striae. *H. trigonifrons* has got, on contrary, the deep and distinctly punctate frontal impression and the complete outer pronotal stria.

Hister javanicus Paykull and its synonymies

The common Indian species *Hister javanicus* exhibits a great deal of variation. Especially, the striation of elytrae is very variable. The typical form has got three complete dorsal striae (Fig. 8), but sometimes the 4th one is complete, too. On a base of this variability Lewis described his *Hister carnaticus*, synonymized later by REICHARDT (1933: 85). The principal character of *Hister javanicus*, distinguishing it from other Oriental species, is the deeply bisinuate anterior margin of pronotum. The other species which posses this character have been described from India and adjacent regions, namely *Hister coracinus* Er., *H. squalidus* Er. and *H. corax* Mars. *H. coracinus* and *H. squalidus* have got four complete dorsal striae while *H. corax* two ones only. Besides, in *H. coracinus* there is an outer subhumeral stria and in *H. squalidus* the pro- and pygidium is distinctly and wholly punctate.

SLAWOMIR MAZUR

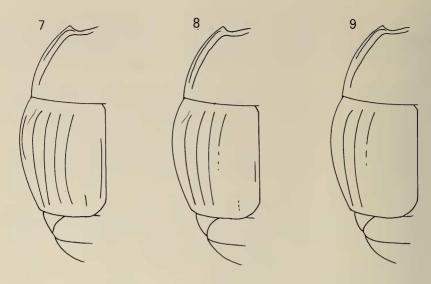


FIG. 7-9.

Variability of stration of Hister javanicus Payk.

During my stay at the Field Museum of Natural History in Chicago I have had the possibility to study large series of specimens of both, *Hister coracinus* and *H. corax*, compared with the original types at Paris and Berlin.

The detailed examination showed, however, that all these specimens represent at most various populations of the same species. The structure of the male copulatory organs is identical and completely agrees with that of *Hister javanicus* (figured by BICKHARDT 1916, t. IX, f. 87*e*).

It fully gives the reasons that *H. coracinus* and *H. corax* are the same species identical with *H. javanicus* (of the same opinion is Dr Rupert L. Wenzel, too). The differences in degree of intensity of pro- and pygidial punctuation are in a normal individual variation as well as the presence of three or four dorsal striae. The same is true to *Hister squalidus*: there are any differences in the structure of the male copulatory organ between it and *H. javanicus* and some affinities with *H. coracinus* are noted, too (DESBORDES 1919: 392): "Cette espèce a parfois, mais très rarement, un vestige de strie subhumérale externe sous l'épaule".

Summarizing, we can say that *Hister javanicus* comprises various populations called, among others, "squalidus", "coracinus", "corax"; with full transition from four complete dorsal and nearly complete sutural stria (carnaticus, squalidus, fortedentatus) through three complete dorsal striae (typical javanicus) to two dorsal and strongly reduced or absent sutural stria (corax) (Fig. 7-9), from distinctly punctate to nearly smooth pygidium.

Hister javanicus has been also introduced to Africa and, as originating from this continent, described by Bickhardt as *Hister angulicollis*. An examination of type of *H. angulicollis*, preserved at now in the Zoological Institute of Polish Academy of Science at Łomna near Warsaw, confirmed its full identity with a typical form of *H. javanicus* considering both, the external morphology and the structure of male aedeagus. The original locality, given by BICKHARDT, is Senegal. THÉROND (1971: 704) reported this species from Mali, the next three African specimens labeled "Abyssinia" are kept in the author's collection.

The full list of synonymies of Hister javanicus is, therefore, as follows:

Hister javanicus Paykull, Monogr. Histeroid., p. 30, t. 4, f. 2, 1811

Syn.: Hister septemstriatus Dejean, Cat. Col., p. 47, 1821.
Hister coracinus Erichson, in Klug Jahrb. Ins., 1, p. 146, 1834. — syn. nov. Hister squalidus Erichson, in Klug Jahrb. Ins., 1, p. 148, 1834. — syn. nov. Hister mandarinus Marseul, Monogr. Histér., p. 535, t. 22, f. 25, 1861.
Hister corax Marseul, Monogr. Histér, p. 537, t. 22, f. 27, 1861. — syn. nov. Hister carnaticus Lewis, Ann. Mag. nat. Hist., (5) 16, p. 210, 1885.
Hister fortedentatus Desbordes, Bull. Soc. ent. Fr., p. 238, 1915.
Hister angulicollis Bickhardt, Abh. Ber. Ver. Naturk. Kassel, 81-83, p. 118, 1919. syn. nov.

Hister javanicus occupies a rather isolated position in the genus *Hister* L. Its nearest relative is the East Palearctic *H. simplicisternus* Lewis (see also KRYZHANOVSKIJ & REI-CHARDT 1976: 314).

Both these species can be separated as follows:

a. Anterior margin of mesosternum nearly straight. Mandibles concave. Anterior tibiae with 4-5 teeth.

H. simplicisternus Lew.

a'. Anterior margin of mesosternum emarginate. Mandibles convex. Anterior tibiae tridentate.

H. javanicus Payk.

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